



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--------------------|----------------------|---------------------|------------------|
| 10/591,284  | 05/14/2007         | Makoto Kosugi        | 90606.789/ku        | 9410             |
| 54071<br>YAMAHA<br>C/O KEATING & BENNETT, LLP<br>1800 Alexander Bell Drive<br>SUITE 200<br>Reston, VA 20191 | 7590<br>09/28/2010 |                      |                     |                  |
| EXAMINER  |                    |                      |                     |                  |
| HOLMES, JUSTIN  |                    |                      |                     |                  |
| ART UNIT  |                    | PAPER NUMBER         |                     |                  |
| 3655  |                    |                      |                     |                  |
| NOTIFICATION DATE   |                    | DELIVERY MODE        |                     |                  |
| 09/28/2010  |                    | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM  
uspto@kbiplaw.com  
sfunk@kbiplaw.com

### Office Action Summary

**Application No.**

10/591,284

**Applicant(s)**

KOSUGI ET AL.

**Examiner**

JUSTIN HOLMES

**Art Unit**

3655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 8/31/06; 5/14/07; 7/14/08; 10/29/09

**DETAILED ACTION**

1. The following is the first action on the merits of application serial no. 10/591,284.
2. Claims 1-13 are currently pending.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on October 29, 2009, July 14, 2008, May 14, 2007 and August 31, 2006 have been considered by the examiner.

***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 16a and 16b as described in the specification on page 10, paragraph 0054 of the substitute specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to because Figures 1, 2, 3, 5, 12-15 and 17 should be identified by Figure number followed by a capital letter (i.e., Figure 1A, Figure 1B, etc.) via 37 CFR 1.84(u)(1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

7. The amendments to the specification as set forth in the Preliminary amendment filed on August 31, 2006 have been entered.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
10. Regarding claims 1 and 13, the phrase "type" is used and the addition of this word to an otherwise definite expression extends the scope of the expression so as to render it indefinite. See MPEP § 2173.05(b)(E).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,299,652 to Bevins in view of U.S. Patent No. 2,655,042 to Almond.

Regarding claims 1 and 10-13, as best understood by the Examiner, the Bevins patent teaches a straddle vehicle having an actuation force transmission mechanism 12 disposed outside of the engine case which shows a coupling rod 35 that pushes against a lever 13 to shift a straddle-type vehicle, the shift control device performing shift control in which a shift actuator is stroked by a predetermined amount to rotate a shift shaft 15. See Figs. 1 and 2 and column 2, lines 44-61.

However, the Bevins patent lacks a teaching of a two piece coupling part.

The Almond patent teaches an actuation force transmission mechanism having first 19 and second 21 coupling parts being sized and configured to be coupled together to provide relative movement in a linear direction, the first coupling part 19 also being coupled to the shift shaft 13 and the second coupling part 21 also being coupled to shift actuator. It would have been obvious to one having ordinary skill in the art that the first coupling part could be attached to the actuator and the second coupling part could be coupled to the shift shaft, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. A biasing mechanism 29 urging the first 19 and second 21 coupling parts toward a neutral position; and a stopper mechanism 22, 25, 26, 28 for stopping the relative movement of the first and second coupling parts when the one of the first and second coupling parts is moved from the neutral position against urging force of the biasing mechanism 29. The force transmission mechanism is provided in a case 20 held by the coupling rod. The case 20 as broadly recited in the claims is held by the coupling rod 19 is interpreted that the case 20 surrounds the coupling rod and is therefore held in place. See Fig. 2.

It would have been obvious to one having ordinary skill in the art to modify the coupling rod 35 of the Bevins patent to include the actuation force transmission mechanism as taught by the Almond patent in order to minimize shock loading of gears when a gear shift takes place. See column 1, lines 10-15 of the Almond patent.

Regarding claim 2, as best understood by the Examiner, wherein the actuation force transmission mechanism is arranged such that, when a resistive force acts linearly against the movement of the actuation force transmission mechanism, the first coupling 19 part moves relative to the second coupling part 21 against the urging force of the biasing mechanism 29 until the first coupling part is stopped by the stopper mechanism 22, and wherein in response to a continuing resistive force, the first and second coupling parts moving together upon the first coupling part being stopped by the stopper mechanism. The stopper mechanism as broadly recited in the claims is defined as the shoulder 22 and the ring 23 interface. See Fig. 2 of the Almond patent.

Regarding claim 3, as best understood by the Examiner, wherein the first coupling part 19 comprises a cylindrical member and the second coupling part 21 comprises a rod, the cylindrical member including a cavity being sized and configured to receive at least a portion of the rod therein. See Fig. 2 of the Almond patent.

Regarding claim 4, as best understood by the Examiner, wherein the biasing mechanism includes a coil spring 29, the coil spring being disposed intermediate the rod and the cylindrical member for providing an urging force in the linear direction between the rod and the cylindrical member. See Fig. 2 of the Almond patent.

Regarding claim 5, as best understood by the Examiner, wherein the rod includes portions of different diameter, see portion 24 of rod 21, a large diameter portion thereof being sized and configured to contact an end of the spring 29, the contact intermediate the large diameter portion of the rod and the spring facilitating the linear exertion of the urging force. The washer 25 is interpreted as being part of the rod 21

and is a larger diameter portion of the rod 21, further the portion 24 is also a larger diameter portion of the rod 21 and that both structures contact the spring 29 as shown in Fig. 2 of the Almond patent.

Regarding claim 6, as best understood by the Examiner, wherein the cylindrical member 19 has a step 22 on its inner surface, the step being utilizable as a part of the stopper mechanism. See Fig. 2 of the Almond patent.

Regarding claim 7, as best understood by the Examiner, wherein the cylindrical member 19 includes plural members having inner and outer surfaces. The inner sliding sleeve 28 is interpreted as being part of the cylindrical member 19 since it interacts with the washers 23, 25 as part of the stopping mechanism and also has inner and outer surfaces as shown in Fig. 2 of the Almond patent.

Regarding claim 8, as best understood by the Examiner, the cylindrical member 19 includes plural cylindrical segments. The plural cylindrical segments as broadly recited in the claims is interpreted as defining different inner diameters as shown in Fig. 2 of the Almond patent.

Regarding claim 9, as best understood by the Examiner, wherein the first and second coupling parts define distal ends, the first and second coupling parts being arranged with the respective distal ends thereof overlapping each other in the linear direction. See Fig. 2 of the Almond patent.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the



unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1, 2, 4 and 10-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 13, 15, 16, 19 and 21-23 of copending Application No. 10/591,559. Although the conflicting claims

are not identical, they are not patentably distinct from each other because the copending application encompasses the limitations of the present application (i.e. coupling rod corresponds to the coupling mechanism of the copending application and coil spring of the subject application corresponds to the compression spring of the copending application).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN HOLMES whose telephone number is (571)272-3448. The examiner can normally be reached on 8:00am to 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David D. Le can be reached on 571-272-7092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUSTIN HOLMES/  
Examiner, Art Unit 3655